Zhi Li

CONTACT Information School of Computer Science and Technology

Hangzhou Dianzi University Hangzhou 310018 China

RESEARCH INTERESTS

Mobile and Sensor Networks, Mobile Crowdsourcing, Machine Learning, Game Theory.

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Skills

Basic: Algorithm design and analysis, System implementation

Programming: Java, Android, Python, NesC, TinyOS

Language: Chinese (Native), English (TOEFL: R27 + L27 + S19 + W23 = 96)

Honors and Awards Outstanding Graduate Student in Zhejiang Province 2017
Outstanding Graduate Student in Hangzhou Dianzi University 2017
National Scholarship for Graduate Student (11/304) 2016
Nokia Scholarship for Graduate Student (2/147) 2015
National Scholarship for Graduate Student (10/283) 2015
The First Prize Academic Scholarship, Hangzhou Dianzi University (10%) 2015 - 2016

PUBLICATIONS

Conference Papers

- Zhi Li, Jianhui Zhang, Jiayu Gan, Pengqian Lu, Fei Lin. "Large-Scale Trip Planning for Bike-Sharing System". In *IEEE MASS*, Short paper, Orlando, FL, USA. Oct 22 - 25, 2017.
- Jianhui Zhang, Zhi Li, Xiaojun Lin, Feilong Jiang. "Composite Task Selection with Heterogeneous Crowdsourcing". In *IEEE SECON*, San Diego, CA, USA. Jun 12 -14, 2017.
- 3. Jianhui Zhang, Mengmeng Wang, **Zhi Li**. "Stochastic Duty Cycling for Heterogenous Energy Harvesting Networks". In *IEEE IPCCC*, Nanjing, China. Dec 14 16, 2015.

Journal Articles

- 1. Jianhui Zhang, Mengmeng Wang, **Zhi Li**. "Charge-aware Duty Cycling Methods for Wireless Systems under Energy-Harvesting Heterogeneity". *IEEE TMC*. Under review.
- 2. **Zhi Li**, Jianhui Zhang, Xingfa Shen, Jin Fan. "Prediction Based Indoor Fire Escaping Routing with Wireless Sensor Network". *Peer-to-Peer Networking and Applications*, 10(3): 697 707. [Impact Factor: 1.0]
- 3. Jianhui Zhang, **Zhi Li**, Shaojie Tang. "Value of Information Aware Opportunistic Duty Cycling in Solar Harvesting Sensor Networks". *IEEE TII*, 12(1): 348 360, 2016. [Impact Factor: 4.708]
- 4. Jianhui Zhang, **Zhi Li**, Feng Xia, Shaojie Tang, Xingfa Shen, Bei Zhao. "Cooperative Scheduling for Adaptive Duty Cycling in Asynchronous Sensor Networks". *The Computer Journal*, 58(6): 1267 1279, 2014. [Impact Factor: 0.787]

PRESENTATION

Stochastic Duty Cycling for Heterogenous Energy Harvesting Networks

- Paper presented at the 34th IEEE International Performance Computing and Communications Conference (IPCCC), Nanjing, China. Dec 15 2015.

RESEARCH PROJECTS

Crowdsourcing Based Bike-Sharing System, 2016 - present

- Designed two algorithms to solve the static trip planning problem, the paper is submitted to IEEE MASS'17.
- Built a crowdsourcing platform to collect real-time bike resources information and to provide bike utilization guidance for users.
- Built an application to crawl real-time open bike-sharing information of Hangzhou Public Bicycle.

Internet of Things Based Fire Escaping System, 2014 - present

- Constructed a fire spread model based on fire data generated by Fire Dynamics Simulator and proposed a fire escaping route planning algorithm based on fire spread prediction.
- Designed a smartphone based crowd density detection approach and two crowd density detection algorithms based on Quorum System.
- Built a fire escaping experiment platform with TelosB nodes.
- Implemented a network with TelosB nodes, Android smartphones and Arduino suite.

Grants

1. Excellent Master Dissertation Fostering Foundation, Hangzhou Dianzi University, PI: Zhi Li, May 2016 - Mar 2017

Project title: "Internet of Things Based Fire Escaping System".

2. **Graduate Scientific Research Foundation**, Hangzhou Dianzi University, PI: Zhi Li, May 2015 - May 2016

Project title: "Wireless Sensor Networks Based Fire Escaping System and Algorithm Design".

 National Natural Science Foundation of China, Participator, Jan 2015 - Dec 2018

Project title: "Research on Environment Information Collaborative Sensing and Processing in Internet of Things".

 Zhejiang Provincial Natural Science Foundation of China, Participator, Jan 2014 - Nov 2016

Project title: "Research on Optimizing Task Scheduling Strategy in Random Energy Harvesting Internet of Things".

Professional Activities

Reviewer for IEEE Transactions on Industrial Informatics Reviewer for The Computer Journal 2017 2015

EDUCATION

Hangzhou Dianzi University, Hangzhou, China

- M.S., Computer Science and Technology, Mar 2017
- Thesis title: "IoT Based Fire Escaping Algorithm and System Design"
- Advisor: Prof. Jianhui Zhang

Hangzhou Dianzi University, Hangzhou, China

- B.E., Computer Science and Technology, Jun 2014

Services

Teaching assistance for JAVA Programming Class monitor

Sep 2015 - May 2016 2014 - 2017

Personal Hobbies

Basketball, Badminton, Cycling, Chinese bamboo flute, Guitar.